



Evaluation Packages and Incremental Development

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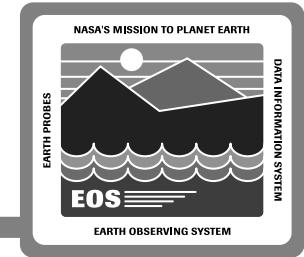
16 February 1995

Agenda



- **Criteria for Incremental Development**
- **Multi-Track Development**
- **Evaluation Packages Life Cycle**
- **User Involvement**
- **Review and Integration Approach**

Incremental Development Criteria



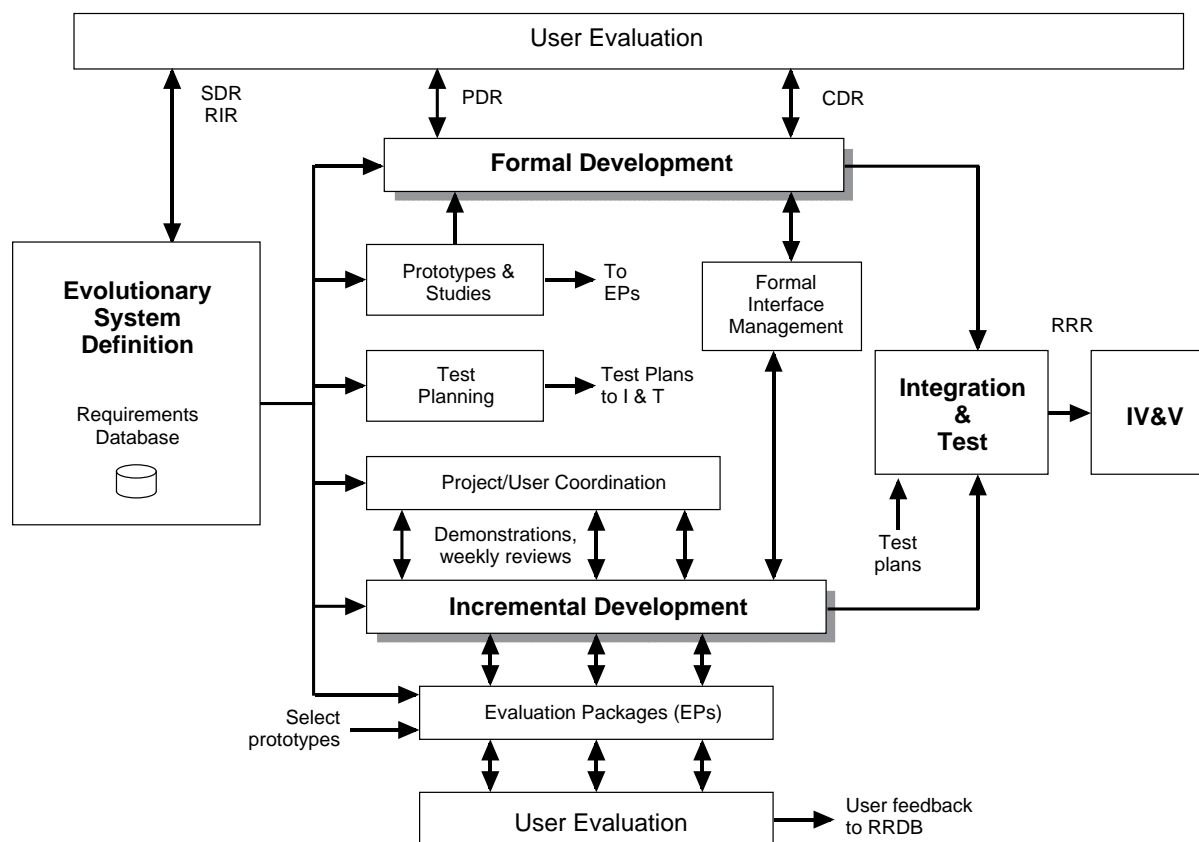
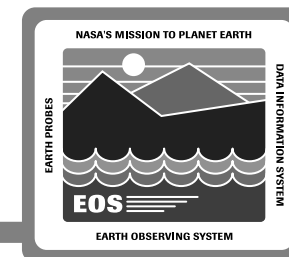
Criteria for Choosing Increments- Why do Incremental Development

- Rapid User Feedback
- Iteration of User Interfaces
- Requirements Evolution for User Access

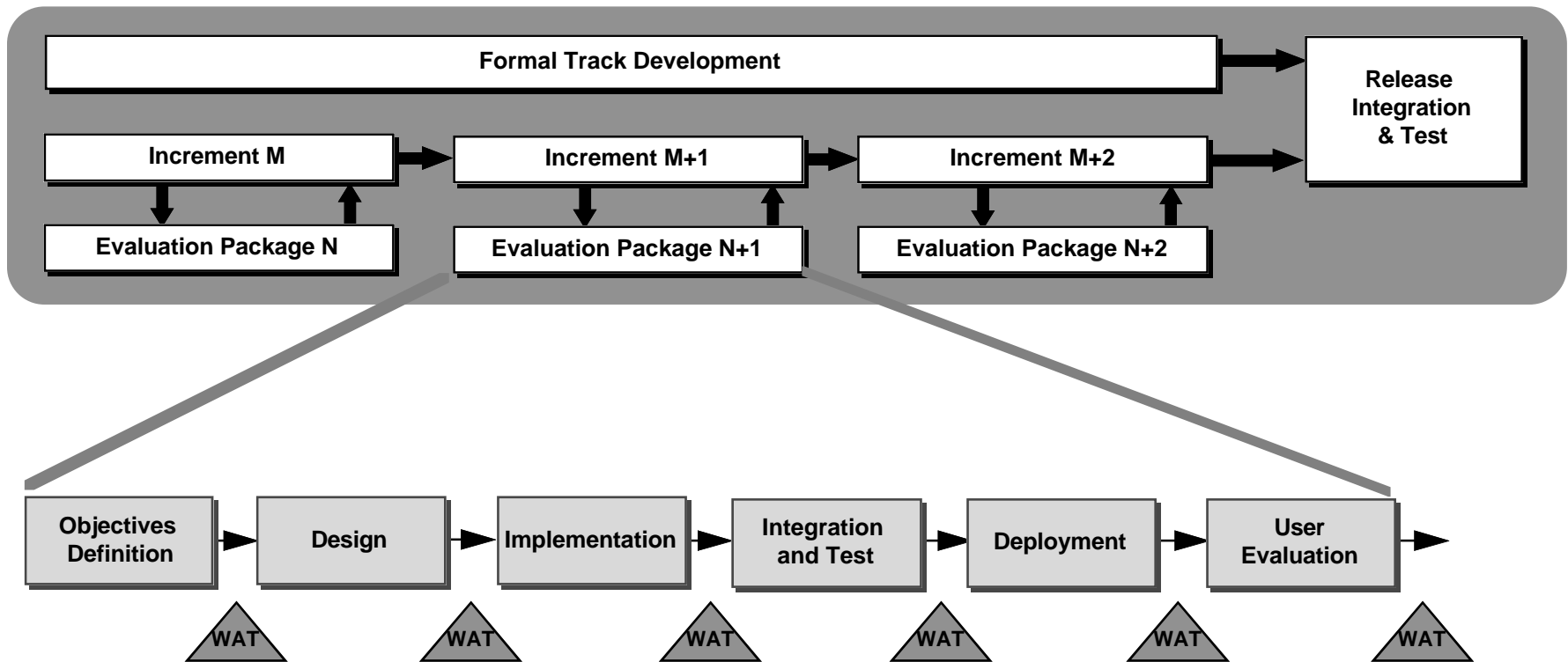
Evaluation Packages (EPs)

- Early Delivery Mechanism for User Evaluation
- EPs Contain Increments and Prototypes

Multi-Track Development for a Release



Evaluation Package Life Cycle



Wide Area Teleconference - WAT

User Involvement



EP Reviews: Wide Area Teleconferences with

- **ESDIS**
- **DAACs, Hosted by ECS DAAC Liaisons**
- **Science Advisors/Tirekickers**

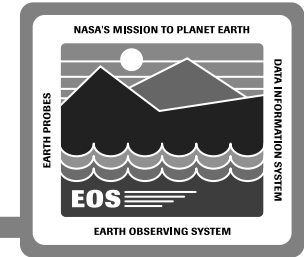
Ongoing ECS Science Office Participation

- **Scenario Definition for Objectives Planning**
- **Identification of Data Sets used in Evaluation**
- **Detailed Science Script for Evaluation**

EP Evaluation Mechanisms

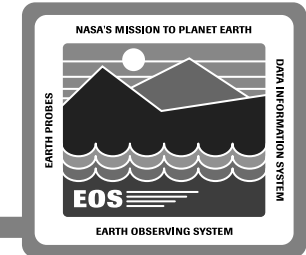
- **On-line User Survey and Free Text Comments**
- **Usability Testing**

Science Advisors/Tirekickers



Peter Evans	Univ. of Miami
Sundar Christopher	South Dakota School of Mines
Nigel Hinds	Univ. of Michigan
Dave Emmitt	Univ. of Virginia
Mary James	GSFC
Liz Smith	Old Dominion University
Dan Baldwin	Univ. of Colorado

Review & Integration Approach



Incremental Reviews/Audits

- **Periodic Walkthroughs of Software Development Folders by ESDIS**
- **Internal Peer Reviews: Design and Code Walkthroughs**

EP Integration and Test (I&T)

- **Dedicated I&T Team**
- **Software Configuration Management (ClearCase)**
- **Integration Test Planning and Results Notebook**
- **Non-Conformance Reports (NCRs): Identification and Resolution**

Integration for a Release

- **As-Built Documentation Prior to Shipment**
- **Code Already Under Configuration Management**
- **NCRs from Unit Test and Operational Fixes**
- **Test Readiness Review (TRR) to begin Release I&T**